

SUBSTITUTE FORM PTO-1449 (MODIFIED)				U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				ATTY. DOCKET NO. 06543/008002		SERIAL NO. 08/878,396				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT Andrew C. Payne et al.										
				FILING DATE June 18, 1997				GROUP A, u, 244 276						
U.S. PATENT DOCUMENTS														
EXAMINER INITIAL	TRADEMARK OFFICE	PATENT NUMBER				ISSUE DATE	PATENTEE			CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
BEN	O I P E C O P Y	AA	4	3	0	5	0	5	9	12/1981	Benton	340	825-33	
BEN		AB	4	5	7	8	5	3	0	03/1986	Zeidler	178	22-09	
BEN		AC	4	7	3	4	8	5	8	03/1988	Schlafly	364	408	
BEN		AD	4	7	5	5	9	4	0	07/1988	Brachtl et al.	364	408	
BEN		AE	4	7	7	5	9	3	5	10/1988	Yourick	364	401	GROUP 9 AUG-3
BEN		AF	4	7	9	5	8	9	0	01/1989	Goldman	235	380	
BEN		AG	4	7	9	9	1	5	6	01/1989	Shavit et al.	364	401	2700 AH 8:44 PM 2:43
BEN		AH	4	8	1	2	6	2	8	03/1989	Boston et al.	235	380	
BEN		AI	4	8	2	7	5	0	8	05/1989	Shear	380	4	
BEN		AJ	4	9	2	2	5	2	1	05/1990	Krikke et al.	329	95	GROUP 1 JUN 30 PM 2:43
BEN		AK	4	9	3	5	8	7	0	06/1990	Burk, Jr. et al.	364	200	
BEN		AL	4	9	4	7	0	2	8	08/1990	Gorog	235	384	
BEN		AM	4	9	7	7	5	9	5	12/1990	Ohta et al.	380	24	2700
BEN		AN	4	9	8	2	3	4	6	01/1991	Girouard et al.	364	550	
BEN		AO	4	9	9	2	9	4	0	02/1991	Dworkin	364	401	
BEN		AP	5	0	2	5	3	7	3	06/1991	Keyser, Jr. et al.	364	408	
BEN		AQ	5	0	6	0	1	5	3	10/1991	Nakagawa	364	405	
BEN		AR	5	0	7	7	6	0	7	12/1991	Johnson et al.	358	86	
BEN		AS	5	2	2	0	5	0	1	06/1993	Lawlor et al.	364	408	
BEN		AT	5	2	4	7	5	7	5	09/1993	Sprague et al.	380	9	
BEN		AU	5	3	0	5	1	9	5	04/1994	Murphy	364	401	03/1992
BEN		AV	5	3	1	1	5	9	4	05/1994	Penzias	380	24	03/26/1993
BEN		AW	5	3	2	1	7	5	1	06/1994	Ray et al.	380	24	02/18/1993
BEN		AX	5	3	3	6	8	7	0	08/1994	Hughes	235	379	05/1992
BEN		AY	5	3	4	1	4	2	9	08/1994	Stringer et al.	380	23	12/04/1992
BEN		AZ	5	3	4	7	6	3	2	09/1994	Filepp et al.	395	200	07/28/1989
BEN		AAA	5	3	5	1	1	8	6	09/1994	Bullock et al.	364	401	01/1991
BEN		AAB	5	3	5	1	2	9	3	09/1994	Michener et al.	380	21	02/1993
BEN		AAC	5	3	8	3	1	1	3	01/1995	Kight et al.	364	401	07/1991
BEN		AAD	5	4	1	4	8	3	3	05/1995	Hershey et al.	395	525	10/1993
EXAMINER				GREGORY				DATE CONSIDERED				1/26/99		

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<p style="text-align: center;">O I P INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)</p> <p style="text-align: center;">JULY 25 1998 (37 CFR 1.90(c))</p>		<p>APPLICANT Andrew C. Payne et al.</p> <p>FILING DATE June 18, 1997</p> <p>GROUP <i>Anu 244 2766</i></p>					
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	PATENT NUMBER		ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>BEN</i>	BA	5 5 5 7 5 1 6	09/1996	Hogan	364	406	02/04/1994
<i>BEN</i>	BB	5 5 5 7 5 1 8	09/1996	Rosen	380	24	04/28/1994
<i>BEN</i>	BC	5 5 9 0 1 9 7	12/1996	Chen et al.	380	24	04/04/1995
<i>BEN</i>	BD	5 5 9 6 6 4 2	01/1997	Davis et al.	380	24	09/30/1994
<i>BEN</i>	BE	5 5 9 6 6 4 3	01/1997	Davis et al.	380	24	01/03/1994
<i>BEN</i>	BF	5 6 0 4 8 0 2	02/1997	Holloway	380	24	07/18/1994
<i>BEN</i>	BG	5 6 2 1 7 9 7	04/1997	Rosen	380	24	12/19/1995
<i>BEN</i>	BH	5 6 2 3 5 4 7	04/1997	Jones et al.	380	24	03/06/1995
<i>BEN</i>	BI	5 6 4 2 4 1 9	06/1997	Rosen	380	24	12/19/1995
<i>BEN</i>	BJ	5 7 1 5 3 1 4	02/1998	Payne et al.	380	24	10/24/1994
<i>BEN</i>	BK	5 7 2 4 4 2 4	03/1998	Gifford	380	24	12/16/1993
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION							
		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
							YES
<i>BEN</i>	BL	0-542-298-A2	05/1993	Europe. EPO	-607F7	40	98 AUG -3 RECEIVED
<i>BEN</i>	BM	2,102,606	02/1983	United Kingdom	-607F7	40	GROUP 244 2766
<i>BEN</i>	BN	WO 91/16691	10/1991	W.I.P.O.	-607F7	40	RECEIVED
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)							
<i>BEN</i>	BO	Abadi, M. et al.; "Authentication and Delegation with Smart-Cards" Report 67; Systems Research Center; Digital Equipment Corporation; Palo Alto, California; October 22, 1990, revised July 30, 1992					
<i>BEN</i>	BP	American National Standard; "Financial Institution Retail Message Authentication"; ANSI X9.19; 1986					
<i>BEN</i>	BQ	American National Standard; "Interchange Message Specification for Debit and Credit Card Message Exchange Among Financial Institutions"; ANSI X9.2; 1988					
<i>BEN</i>	BR	Anderson, Ross J.; "UEPS - A Second Generation Electronic Wallet"; Proc. of the Second European Symposium on Research in Computer Security (ESORICS); Toulouse, France; pp. 411-418; November, 1992					
EXAMINER		DATE CONSIDERED		<i>1/26/99</i>			
<i>GREGORY</i>				98 JUN 30 PH 2:43 GROUP 2766 RECEIVED			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use several sheets if necessary)		APPLICANT Andrew C. Payne et al.		
		FILING DATE June 18, 1997	GROUP A, U, 244 Z 766	
SUN 25 1997 677 CER 1 98(B) OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)				
BEN	AA	Anderson, Ross ; "Why Cryptosystems Fail"; Proc. 1st Conf. Computer and Comm. Security; pp. 21-27; November, 1993	AUG 20 1997	RE
BEN	CB	Bank Administration Institute; <u>Payment Systems in Eleven Developed Countries</u> ; "United States"; pages 235-235; 1989	AM 21 1997	V
BEN	CC	Batelaan; Butler; Chan; Chen; Evenchick; Hughes; Jen; Jeng; Millett; Riccio; Skoudis; Starace; Stoddard; "An Internet Billing Server Prototype Design"; Carnegie Mellon University; 1992	AM 21 1997	V
BEN	CD	Batelaan; Butler; Chan; Chen; Evenchick; Hughes; Jen; Jeng; Millett; Riccio; Skoudis; Starace; Stoddard; "An Internet Billing Server: System Requirements"; Carnegie Mellon University; Master of Science thesis; 1992		
BEN	CE	Bellcore Internal E-Mail, November 24, 1993		
BEN	CF	Bender, M.; "EFTS: Electronic Funds Transfer Systems"; Kennikat Press; Port Washington, New York; pp. 43-46; 1975		
BEN	CG	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "An Internet Billing Server: Analysis of Distributed Computing and Cross Platform Issues"; Carnegie Mellon University; thesis; 1993		
BEN	CH	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "An Internet Billing Server: Availability, Reliability & Scalability Issues in the MS4 Billing Server Design & Prototype"; thesis; 1993		
BEN	CI	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "The Internet Billing Server: Design Document"; Carnegie Mellon University Information Networking Institute; Master of Science thesis; 1993		
BEN	CJ	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "The Internet Billing Server: Prototype Requirements"; Carnegie Mellon University Information Networking Institute; thesis; 1993		
BEN	CK	Bos et al.; "SmartCash: A Practical Electronic Payment System"; pp. 1-8; August, 1990		
BEN	CL	Bürk et al.; "Value Exchange Systems Enabling Security and Unobservability"; <u>Computers & Security</u> , 9; pp. 715-721; 1990		
BEN	CM	Chaum et al.; "Achieving Electronic Privacy"; <u>Scientific American</u> ; pp. 319-327; 1988		
BEN	CN	Chaum, D.L. et al.; "Implementing Capability-Based Protection Using Encryption"; Electronics Research Laboratory, College of Engineering, University of California, Berkeley, California; July 17, 1978		
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<p style="text-align: center;">O I P INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)</p> <p style="text-align: center;">(37 CFR 2.50(b)(3))</p>		APPLICANT Andrew C. Payne et al.		
		FILING DATE June 18, 1997	GROUP A, 4, 2446 Z 766	
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)				
<i>BEN</i>	DA	Cham et al.; "Untraceable Electronic Cash"; <u>Advances in Cryptology</u> ; pp. 319-327; 1988		
<i>BEN</i>	DB	Cohen, Danny; "Computerized Commerce"; ISI Reprint Series ISI/RS-89-243; October, 1989; Reprinted from <u>Information Processing 89, Proceedings of the IFIP World Computer Congress</u> , held August 28 - September 1 1989		
<i>BEN</i>	DC	Cohen, Danny; "Electronic Commerce"; University of Southern California, Information Sciences Institute, Research Report ISI/RR-89-244; October, 1989		
<i>BEN</i>	DD	Compuserve International; Compuserve Information Service Users Guide; pp. 109-114; 1986		
<i>BEN</i>	DE	X Computer Shopper; "Internet for Profit"; pages 180-182, 187, 190-192, 522-528, 532, 534; November, 1994		
<i>BEN</i>	DF	X Davies, D.W. and Price, W.L.; "Security for Computer Networks: An Introduction to Data Security in Teleprocessing and Electronic Funds Transfer"; John Wiley & Sons; December 5, 1985; pages 304-336		
<i>BEN</i>	DG	Dukach, Semyon; "SNPP: A Simple Network Payment Protocol"; MIT Laboratory for Computer Science; Cambridge, Massachusetts; 1993		
<i>BEN</i>	DH	Even et al.; "Electronic Wallet"; pp. 383-386; 1983		
<i>BEN</i>	DI	Gifford, David and Spector, Alfred; "Case Study: The CIRRUS Banking Network"; Comm. ACM 8, 28' pp. 797-8078; August, 1985		
<i>BEN</i>	DJ	Gifford, David K.; "Cryptographic Sealing for Information Secrecy and Authentication"; Stanford University and Xerox Palo Alto Research Center; Communications of the ACM; Vol. 25, No. 4; April, 1982		
<i>BEN</i>	DK	Gifford, David; "Notes on Community Information Systems" MIT LCS TM-419; December, 1989		
<i>BEN</i>	DL	Gligor, Virgil D. et al.; "Object Migration and Authentication"; IEEE Transactions on Software Engineering; Vol. SE-5, No. 6; November, 1979		
<i>BEN</i>	DM	Harty et al.; "Case Study: The VISA Transaction Processing System"; 1988		
<i>BEN</i>	DN	Information Network Institute, Carnegie Mellon University; Internet Billing Server; Prototype Scope Document; October 14, 1993		
EXAMINER		DATE CONSIDERED		GROUP A, 4, 2446 Z 766
<i>GREGORY</i>		1/26/99		RECEIVED
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O T P INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) JUN 25 1998 P A T E N T & T R A D E M A R K O F F I C E 37 CFR 1.98(b)		APPLICANT Andrew C. Payne et al.		
		FILING DATE June 18, 1997	GROUP A, U, 2444 Z 766	
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)				
BEN	EA	Intel Corporation; Power Technology; Marketing Brochure, NO DATE		
BEN	EB	International Organization for Standardization; "International Standard: Bank Card Originated Messages - Interchange Message Specifications - Content for Financial Transactions"; ISO 8583; 1987		
BEN	EC	Intuit Corp Quicken User's Guide; "Paying Bills Electronically"; pp. 171-192; 1993		
BEN	ED	Jansson, Lennart; "General Electronic Payment System"; 7th Proceedings of the International Conference on Computer Communication; Pages 832-837; 1985		
BEN	EE	Krajewski, M. et al.; "Applicability of Smart Cards to Network User Authentication"; Computing Systems; Vol. 7, No. 1; 1994		
BEN	EF	Krajewski, M.; "Concept for a Smart Card Kerberos"; 15th National Computer Security Conference; October, 1992		
BEN	EG	Krajewski, M.; "Smart Card Augmentation of Kerberos"; Privacy and Security Research Group Workshop on Network and Distributed System Security; February, 1993		
BEN	EH	Lampson, Butler; Abadi, Martin; Burrows, Michael; and Wobber, Edward; "Authentication in Distributed Systems: Theory and Practice"; ACM Transactions on Computer Systems; Volume 10, Number 4; November, 1992; pp. 265-310		
BEN	EI	Mak, Stephen; "Network Based Billing Server"; Carnegie Mellon University Information Networking Institute; Masters of Science thesis; 1991		
BEN	EJ	Medvinsky et al.; "Electronic Currency for the Internet"; Electronic Markets; pp. 30-31; September, 1993		
BEN	EK	Medvinsky et al.; "NetCash: A Design for Practical Electronic Currency on the Internet"; Proc. 1st ACM Conf. on Comp. and Comm. Security; November, 1993		
BEN	EL	Miller, S.P.; Neuman, B.C.; Schiller, J.I.; Saltzer, J.H.; "Kerberos Authentication and Authorization System"; Project Athena Technical Plan, Section E.2.1; Massachusetts Institute of Technology; October, 1988		
BEN	EM	Mosaic Communications Corp. press release; "Mosaic Communications Unveils Network Navigator and Server Software for the Internet"; September 12, 1994		
BEN	EN	Needham, Roger M. and Schroeder, Michael D.; "Using Encryption for Authentication in Large Networks of Computers"; Communications of the ACM; Volume 21, Number 12; December, 1978; Pages 993-999		
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		FILING DATE June 18, 1997	GROUP <i>AU, 244, 2766</i>	
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)				
<i>DEC</i>	FA	National Westminster Bank Group; "Clearing House Automated Payments System"; pp. 1-29, <i>no date</i>		
<i>DEC</i>	FB	Needham, Roger M.; "Adding Capability Access to Conventional File Servers"; Xerox Palo Alto Research Center; Palo Alto, California; <i>no date</i> .		
<i>DEC</i>	FC	Neuman, B. Clifford; "Proxy-Based Authorization and Accounting for Distributed Systems"; Proceedings of the International Conference on Distributed Computing Systems; May 25-28, 1993; Conf. 13; IEEE pages 283-291		
<i>DEC</i>	FD	Okamoto et al.; "Universal Electronic Cash"; pp. 324-337; 1991		
<i>DEC</i>	FE	Pfitzmann et al.; "How to Break and Repair a 'Provably Secure' Untraceable Payment System"; pp. 338-350; 1991		
<i>DEC</i>	FF	Rescorla, E. and Schiffman, A.; "The Secure HyperText Transfer Protocol"; Enterprise Integration Technologies; June, 1994		
<i>DEC</i>	FG	Rivest, R.; "The MD5 Message-Digest Algorithm"; MIT Laboratory for Computer Science and RSA Data Security, Inc.; April, 1992		
<i>DEC</i>	FH	Rivest, R.L. et al., "A Method for Obtaining Digital Signatures and Public-Key Cryptosystems," Laboratory for Computer Science, Massachusetts Institute of Technology, Cambridge, Massachusetts		
<i>DEC</i>	FI	Schamüller-Bichl, I.; "IC-Cards in High-Security Applications"; Selected Papers from the Smart Card 2000 Conference; Springer Verlag; pp. 177-199; 1991		
<i>DEC</i>	FJ	Sirbu, Marvin A.; "Internet Billing Service Design and Prototype Implementation"; An Internet Billing Server; pp. 1-19; 1993		
<i>DEC</i>	FK	Society for Worldwide Interbank Financial Telecommunications S.C.; "A S.W.I.F.T. Overview"		
<i>DEC</i>	FL	Tenenbaum, Jay M. and Schiffman, Allan M.; "Development of Network Infrastructure and Services for Rapid Acquisition"; adapted from a white paper submitted to DARPA by MCC in collaboration with EIT and ISI		
<i>DEC</i>	FM	Vittal, J. "Active Message Processing: Messages as Messengers"; pp. 175-195; 1981		
<i>DEC</i>	FN	Voydock, Victor et al.; "Security Mechanisms in High-Level Network Protocols"; Computing Surveys; Vol. 15, No. 2; June, 1981		
EXAMINER		GREGORY DATE CONSIDERED <i>1/26/99</i>		

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